# CHAPTER 5 SUMMARY AND CONCLUSIONS

This report relates to an analysis of sex and age structure of the Cambodian population as revealed by the 2008 Census. The changes in these characteristics during 1998-2008 are also highlighted in the report. The basic information made available by a population census is the number of males and females in the population. In both the 1998 and 2008 Censuses of Cambodia, disaggregated information by males and females has been produced for almost all topics. This is a basic requirement in development planning. It also enables determination of gender impacts of development activities and helps respond effectively to gender issues.

#### 5.1 The levels of Sex Ratio

The changes in socio-economic and cultural patterns as well as in the political situations mostly influence the sex composition or sex structure of a population. With the overall sex ratio (number of males per 100 females) of the total population of Cambodia at 94.7 according to the 2008 Census, there is an excess of females in the Cambodian population. In most of the countries of the world sex ratio ranges from 95 to 105. The sex ratios of the neighbouring countries of Lao PDR, Thailand and Viet Nam are in the order of 98.

The lower sex ratio of Cambodia may be mainly attributed to war and political instability in the past. The period of war spanning three decades witnessed unprecedented male mortality in the country that resulted in differential mortality between males and females. As the international migration in Cambodia is not significant it could not have affected the overall sex structure at the national level.

#### 5.2 Sex Ratio Differentials

As regards sex ratio by religion, Buddhists who predominate in Cambodia have the same sex ratio as the overall sex ratio (94.7). Among Muslims the sex ratio is not very different (94.9). Christians who form comparatively a very small number have a much higher sex ratio (104.4) due to predominance of males among migrants and visitors.

The higher number of males at birth decreases with age mainly due to higher number of male deaths. It is noted that the sex ratios among children in the age groups 0-4, 5-9 and 10-14 are not very different in 1998 and 2008. In the age group 15-19 in 1998 and in the corresponding cohort of 25-29 in 2008 the sex ratio is close to 100. If only the broad age group 15-29 of the 2008 Census is considered the number of males and females are almost equal (nearly 2.11 million) with the sex ratio of 99.9.

In the middle and older ages the number of females very much exceeds the number of males due to higher male mortality. Low sex ratios from the age group 40-44 onwards in 1998 (50-54 onwards in 2008) are the results of higher mortality among males and large scale exodus of adult males from Cambodia during the Khmer Rouge years.

In general this sex ratio among children is very high. Unlike the sex ratio of the total population, sex ratio among children is not influenced much by sex selective spatial mobility of population. Migration in these age groups normally occurs with family. The main determinants of sex composition in these age groups are sex ratio at birth and sex differentials of mortality rates among children. Sex ratio among children may therefore be considered as a better indicator of gender relations in the population.

In the provinces of Koh Kong, Mondulkiri, Ratanak Kiri, Otdar Meanchey and Pailin, males predominate in the working ages. This may be due to influx of male migrant workers. Phnom Penh, Prey Veng and Svay Rieng provinces have recorded relatively low sex ratios in the age group 15-64 either due to inflow of women migrant workers from other provinces or out migration of male workers. The sex ratio is 97.7 among the inter-province migrants showing that more females move from one province to another.

The urban-rural pattern of sex ratio in Cambodia has changed during 1998-2008. In 1998 urban sex ratio (94.9) was higher than that of rural areas (92.6) as is generally the case. But in 2008 this trend has reversed with rural Cambodia registering a sex ratio (95.3) higher than the urban sex ratio (92.4). An analysis of the cause for the change has revealed that this has happened as urban Phnom Penh and urban Kandal have registered much lower sex ratios in 2008 than in 1998. This decline is mainly attributable to the fact that during 2003-2008 a large number of young women workers moved into urban Phnom Penh and neighbouring urban parts of Kandal province to work in garment factories. The decline in the sex ratios of urban Phnom Penh and urban Kandal has lowered the sex ratio of urban Cambodia as a whole.

As regards the sex ratios of the Natural Regions, the Plateau and Mountain, the Coastal, the Tonle Sap and the Plain regions have maintained the ranks of 1 to 4 respectively. The Plateau and Mountain Region has recorded the highest increase and the Plain Region the lowest increase during the decade.

It is observed that the sex ratio varies from province to province. In 2008 the following nine provinces have recorded a sex ratio each which was lower than that for Cambodia as a whole: Kampong Cham, Kampong Chhanang, Kampot, Kandal, Phnom Penh Municipality, Prey Veng, Pursat, Svay Rieng and Takeo. The remaining 15 provinces have recorded a sex ratio each higher than the national average.

The sex ratios for the districts/krongs in each province according to the 1998 and 2008 Censuses are given in Annex 1 (Table AT01) for easy reference. The sex ratios in these administrative units vary from 82.8 in Dangkao district of Phnom Penh Municipality to 113.8 in Veal Veaeng district of Pursat Province. In accordance with the general increase in sex ratio between 1998 and 2008 at the national level most of the provinces have recorded increased sex ratio in 2008 compared to 1998. The amount of increase ranges from less than one point in Preah Vihear to 5.4 points in Ratanak Kiri. In the following provinces, however, the sex ratio has decreased during this period by the number of points indicated: Bantey Meanchey (0.4), Koh Kong (3.3), Phnom Penh Municipality (4), Oddar Meanchey (0.4) and Pailin (11.5).

#### 5.3 Reasons for Changes in Sex Ratio

It has been shown that net migration has influenced the sex ratio of Ratanak Kiri province which has increased by a maximum of 5.4 points and the sex ratio of Pailin province which has declined by a maximum of 11.5 points during the decade 1998-2008. The analysis has shown that the changes in sex ratio in respect of each province, district/krong and in the urban and rural areas may be accounted for by the cumulative effect of sex-selective internal migration, jurisdictional changes made under the Royal Sub-Decrees, the sex ratio at birth and the differential mortality of males and females.

#### 5.4 Age-Sex Structure of Cambodia

An evaluation made adopting different methodologies has shown that the age returns of the 2008 Census could be considered as fairly reliable despite some irregularities. The age structure of a population is determined by the same three factors which affect the growth rate of any population, namely fertility, mortality and migration. Cambodian population structure is not affected by international migration as it is very small. However internal migration affects the age structure of provincial populations.

The population pyramids of the 1998 and 2008 Censuses reveal the age-sex structures of Cambodia as a whole at the respective years. The proportion of children in the age group 0-4 is less than that in the age group 5-9. This could have been due to recent decline in fertility and under-reporting of infants and young children or an exaggeration of their ages or what might not be probable, an increase in infant and child mortality. The age group 10-14 represents the largest cohort (12.5 percent) reported at the 2008 census. This is closely followed by the cohort of ages 15-19 indicating comparatively high fertility level in the early 1990s following a baby boom reported in the early 1980s.

Above the age group 10-14, the 2008 population pyramid shows the usual pattern of gradually decreasing numbers with increasing age. There is, however, a conspicuous exception in the age group 30-34 which has shown a steep decline. This may be attributed to the combined effect of low fertility and high mortality of those born in and around the Khmer Rouge period (1976-79). The early 1970s saw escalating civil war and in the late 70s during the Khmer Rouge period, a large number of killings took place. The sex and age structure beyond age 35 as revealed by the age pyramid reflects the high levels of mortality especially among men during these years of turmoil and internal strife.

#### 5.5 Changes in Age-Sex Structure

A comparison of the age pyramids for 1998 and 2008 shows a fairly consistent pattern in the age distribution. The numbers of children in the age groups 0-4 and 5-9 have decreased during the decade whereas the number in the age group 10-14 has marginally increased. The age groups from 15-19 onwards have shown increases except the age group 30-34. The highest increase is recorded by the age group 20-24.

The proportions of children in the age groups 0-4, 5-9 and 10-14 in the rural areas are much higher than their corresponding proportions in the urban areas. This is expected as the fertility level in the rural areas (TFR of 3.3) is higher than that in the urban areas (TFR of 2.1). Among migrants in the urban areas the proportion of children is small. Moreover out-migration of population in the working age groups is also responsible for a higher share of children in the rural population.

In each of the age groups 15-19, 20-24 and 25-29 the proportions of the population are much higher in the urban areas than in the rural areas. The persons in these working age groups in the urban areas include migrants from the rural areas. This is true of both males and females. From the age group 30-34 up to 55-59 which are also working age groups of middle aged persons the proportions are higher in the urban areas but the differences between the urban and the rural proportions are smaller. In the age groups 40-44 onwards the rural proportions are higher barring the age group 50-54. From the age group 60-64 onwards the rural proportion is higher in every age group. The proportions of population in the four broad age groups drawn from different sources indicate the general declining trend of percentage of children (0-14) in the population and the rising trend of the working age population (15-64). There has been only a marginal increase in the proportion of the elderly population (65+) during the decade 1998-2008.On the basis of the proportion of children in the population it could be said that the fertility levels of Vietnam and Thailand are lower than that of Cambodia and the fertility rate of Lao PDR is higher.

## 5.6 The Median Age

The median age of the Cambodian population works out to 22.06 in 2008 which is about four years more than what it was in 1998. The median age for males in Cambodia is 20.81 in 2008 as against 16.91in 1998. In respect of females it is 23.26 in 2008 as against 19.17 in 1998. The median age of the urban areas is higher than that of the rural areas. Among the countries of the world the median

age varies from 15 in Uganda to 45.7 in Monaco and 44.2 in Japan. In most of the European countries it is above 40. Within the South East Asian region it is 31.3 in Thailand and 27.4 in Viet Nam.

Among the provinces, the median age is the highest in Phnom Penh Municipality (24.72). This is understandable since the fertility level of Phnom Penh in 2008 (TFR 2.0) is the lowest in the country. In the North and Northeast provinces of the Mountain and Plateau region like Preah Vihear, Stung Treng, Ratanak Kiri and Mondul Kiri the median age is below 20. It is the lowest in Mondol Kiri province. The median age has increased in all the provinces during 1998-2008 though in varying degrees.

The national level TFR is 3.1 according to the Analytical Report on Fertility and Mortality in Cambodia (February 2010). The provinces in the mountain and plateau region mentioned above have each a TFR level (more than 4) which is much higher than the National level In Otdar Meanchey province also where the TFR (3.3) is higher than that at the national level the median age is low (19.72). Though the median age of females is generally higher, it is marginally lower than that of males in the provinces of Kandal and Mondol Kiri.

#### 5.7 Population of Children (Aged 0-14 years)

Numerically the population of children in the country has decreased from 4,897,808 in 1998 to 4,513,792 in 2008. In terms of proportion it has declined from 42.8 per cent to 33.7 per cent, that is, by 9.1 points. The proportions of children in the populations of the provinces are not uniform.

## 5.8 Working-Age Population (Aged 15-64 years)

The percentage of working age population of Cambodia has increased from 53.7 percent in 1998 to 62.0 percent in 2008. The increase is from 51.6 percent to 60.9 percent in the case of males and from 55.7 percent to 63.1 percent for females. It is also noted that the gap in the proportions of males and females has reduced from about 4 points in 1998 to 2 points in 2008.

Among the provinces the proportion of working age population ranges from about 57 percent in the provinces of Mondul Kiri, Preah Vihear and Ratanak Kiri to about 75 percent in Phnom Penh.

## 5.9 The Elderly Population (Aged 65+ years)

The proportion of elderly population (4.3 percent in 2008) has increased by less than one percentage point in the country as a whole during 1998-2008. In 2008 the percentage of the elderly among females is higher than that among males by 1.43 percentage points. Among the provinces, the percentage of elderly population in 2008 varies from less than 3 percent in Koh Kong, Mondul Kiri, Ratanak Kiri, Siem Reap, Preah Sihanouk, Otdar Meanchey and Pailin to 5 percent or little more than that in the provinces of Kampong Cham, Kandal, PreyVeng and Takeo. The remaining provinces have proportions in the intermediate range.

In 2008 a large majority of the elderly in Cambodia is found in the young-old (age 65-74) category. The medium-old (age 75-84) and the oldest old (age 85+) categories account for about 29 percent and 6 percent of the total elderly population respectively. Among the elderly as a whole and in each of the sub-categories, women outnumber men. The overall sex ratio is 67.48 among the elderly population. In the young-old, the medium-old and the oldest-old categories the sex ratios are: 69.79, 64.38 and 57.77 respectively.

## 5.10 Categorization of the Cambodian Population

The aging index called aged-child ratio is also regarded as an indicator of a young or old population and of a population that is aging or becoming young. It is the ratio of the number of elderly persons (65+) to the number of children (0-14) expressed as a percentage. For Cambodia it is calculated as 12.7 in 2008.

Taking into account all the relevant indices at the National level, the Cambodian population may be described as "young" that appears to be moving towards the category of "intermediate age" and ultimately perhaps to the category of "Aging population" in the long run. It has to be pointed out here that aging of a population is different from aging of individuals, an increase in the longevity of individuals or an increase in the average length of life in respect of a population.

## 5.11 Declining Age Dependency Ratio

The age-dependency ratio for Cambodia has shown a declining trend during 1998-2008 indicating a reduction in the dependency burden. The decline is faster in urban areas as it has come down by about 38 percent as against about 27 percent in rural areas. The dependency ratio is generally lower in the urban areas in all the provinces.

### **5.12 Provisional Projections**

Based on the 2008 Census results, NIS has made preliminary population projections. It is observed that the percentage of children in the population will decrease to 26.9 and 24.31 in 2020 and 2030 respectively from its present level of 33.72 percent mainly due to decline in fertility. There will be gradual increases in the proportion of working age population and the elderly population.

### **5.13 Policy Implications**

The overall increase in the working age population up till now and the projected increase in the future have serious implications on the youth and the unemployment situation in the country. In developed countries the phenomenal rise in the working population due to demographic transition had proved to be a "demographic dividend" for some time. But in the case of Cambodia, it is a great challenge to absorb the growing labour force in productive work. Due to limited opportunities in the rural areas, rural-urban migration of poor families is increasing day by day.

Cambodia has been exporting migrant workers to other countries in Asia and the Gulf countries. This step may mitigate the problem to a certain extent. In this context, it would be appropriate to mention that the RGC is also implementing measures to create more jobs and ensure better working conditions for the labour force. The Ministry of Labour and Vocational Training of the RGC has set out the five-year Action Plan for the years 2009 to 2013. The proposed Cambodia National Youth Policy is yet another step which will benefit young Cambodians (age 15-30) in the long run.

Declining fertility and reduced number of children is potentially powerful tool for reducing poverty. The overall poverty level in Cambodia has decreased from 34.7 percent in 2004 to 30.1 percent in 2007. The Mid-Term Review 2008 on NSDP (2006-2010) of Cambodia has concluded that "much more concerted efforts would be needed to reduce overall poverty levels to 25 percent in 2010 and 19.5 percent by 2015.

If successfully implemented with national efforts and through global support, these progressive steps as well as achievements of CMDG targets are likely to result in the full utilization of human resources in the process of economic development of the country. Measures for the care of the elderly may also become increasingly necessary with the rise in their proportion in course of time.